Remarks

Claims 88, 90, 92-123, 125-128, and 131 were pending in the application. No claims have been added. Claims 88 and 120-123 have been amended to call for an adhesive layer between the carpet layer and the backing or the cushion back. Thus claims 88, 90, 92-123, 125-128, and 131 are subject to continued examination.

Obviousness Rejections

Claims 88, 90, 92-123, 125-128, and 131 were rejected under 35 U.S.C. §103(a) as being unpatentable over Higgins (US 4,552,857) in view of De Simone et al. (US 5,610,207). Continued rejection on these grounds is respectfully traversed and reconsideration is requested.

In order to establish a *prima facie* case of obviousness there must be some suggestion or motivation that would lead to the claimed invention. The suggestion or motivation may derive from the references themselves or from the knowledge generally available to those of skill in the art. In addition, all the claim limitations must be taught or suggested by the prior art (MPEP § 2142). Applicants respectfully submit that these standards are not met with regard to the claims as now presented.

The Office Action proposes that De Simone et al. '207 teaches a rebond polyurethane foam product which is suited for a carpet backing. The Office Action relies on the abstract and col. 2, lines 34-45 for this teaching (section 6 of Office Action). Applicants respectfully submit that the abstract merely describes the process used to form the rebonded foam. Furthermore, col. 2, lines 34-45 describes formation of a sandwich structure in which the rebonded foam is the core and the outer layers are preferably polyurethane foam. Such a three layer structure would likely be a

separate pad. Other examples of potential outer layers include metal, wood, cork, plastics, tissue and woven or unwoven fabrics, e.g. carpet backing (col. 2, lines 41-43). De Simone '207 does not suggest that the rebond foam can be a carpet backing. On the contrary, De Simone '207 describes that a carpet backing fabric can be one of the outer layers attached to the rebonded foam. De Simone '207 is merely directed to a rebonded foam pad or underlayment. Applicants strongly believe that it is improper to infer that the rebonded foam is utilized as a carpet backing based solely on the fact that the disclosure says that the rebonded foam can be bonded to a carpet backing fabric.

Claims 88 and 120-123 have been amended to call for a carpet tile having a layer of adhesive between the carpet layer and the backing or the cushion back including a preformed sheet of rebond foam. De Simone et al. '207 does not appear to disclose a carpet tile having a preformed sheet of rebond foam. In contrast, De Simone et al. '207 appears to be directed to forming a re-bonded foam in-situ by mixing pieces of foam with liquid polyol and liquid polyisocynate. For the sake of argument, creating the rebonded foam in-situ would create a structure where the foam is directly attached to the carpet layer (no adhesive layer needed). Hence, De Simone et al. '207 appears to teach away from the claimed invention of a preformed foam layer attached to the carpet layer with an adhesive layer.

Further, as best understood by Applicants, De Simone et al. '207 is not directed to carpet tile much less cushion back carpet tile. Also, it appears that De Simone et al. '207 is not directed to attached cushion broadloom carpet. It appears that De Simone et al. '207 is directed to low density recycled, in-situ rebonded, foam pad. Column 2, lines 40 – 45 of De Simone et al. '207

appear to refer to making a tri-laminate pad with a central layer of foam pieces and upper and lower layers of preferably polyurethane foam. It is believed that De Simone et al. '207 is directed to making pad or underlayment for use with separate, unattached broadloom carpet rather than for making attached cushion broadloom (roll goods) and is in no way directed to making carpet tile much less, cushion back carpet tile. Applicants believe that the reference to "carpet backing" in De Simone et al. '207 is an example of woven or unwoven fabrics rather than to putting the recycled foam pieces of De Simone '207 on the back of carpet. De Simone '207 does not state "carpet". It states "carpet backing" as an example of fabric. Applicants respectfully believe that De Simone et al. '207 is directed to unattached pad or underlayment rather than to attached cushion broadloom. None of the Examples in De Simone '207 appear to have an upper or lower layer of fabric, much less carpet. The upper and lower layers in the Examples of DeSimone '207 appear to be foam layers. Hence, De Simone '207 is not directed to carpet tile, and does not enable carpet tile having a preformed rebond foam sheet.

Further, as De Simone '207 is not directed to carpet tile or even attached cushion broadloom carpet, neither De Simone '207 nor Higgins '857 provide the necessary motivation or suggestion for combination or for substituting the recycled foam of De Simone '207 for the foam layer of Higgins '857. As described earlier, it would not have been obvious to substitute rebond foam for the virgin foam in a carpet tile. It would have been even less obvious to substitute low density rebond foam for virgin foam. Further, it is not obvious to combine pad or underlayment art (De Simone '207) with freelay carpet tile art (Higgins '857) as carpet tiles, especially freelay carpet tiles, are required to be dimensionally stable.

As one of skill in the carpet tile art would readily understand, changes to a dimensionally stable carpet tile structure, even one layer in a stable structure (such as a freelay tile like Higgins '857), are not taken lightly, are viewed with skepticism, and are not done by even experts in the carpet tile art to save money, reduce mass, or the like (see Norton declaration).

Prior to the present invention, carpet tiles were known and rebond foam pads were known but those skilled in the carpet tile art did not use preformed rebond pad in carpet tiles. One of skill in the carpet tile art would not substitute rebond foam pad (low density recycled foam of De Simone '207) for the foam layer in a carpet tile. One of skill in the carpet tile art would not look to De Simone '207 for motivation or suggestion in modifying the Higgins '857 carpet tile structure.

Still further, the Higgins '857 carpet tile effectively has two stabilizing layers (layers 18 and 26) and does not have a preformed rebond foam layer. As Higgins '857 is directed to a stabilized, freelay, virgin foam, carpet tile, one of skill in the carpet tile art would not remove the stabilizing layers or the virgin foam layer. One does not make changes to a stable carpet tile structure in light of the many tile failures over the years, changes in one layer can effect the dimensional stability of the tile (cause cupping and curling, delamination), and the like. Adding a layer or substituting a new material for a layer can have a devastating instantaneous or latent effect on a carpet tile, especially a freelay carpet tile.

Applicants respectfully submit that the proposed combination of references in the

rejection is inconsistent with the teachings of the cited art when considered in the context of the accepted wisdom held by those of skill in the art at the time the current application was filed. Thus, the conclusion by the Patent Office appears to not be supported by what the skilled person would have been motivated to do (or to not do).

As noted at MPEP §2142, to reach a proper determination under 35 U.S.C. 103, the Examiner must step back in time and into the shoes worn by a person of ordinary skill in the art when the invention was unknown and just before it was made. In view of all factual information, the Examiner must then make a determination of whether or not the claimed invention as a whole would have been obvious at that time to that person. Impermissible hindsight must be avoided and the legal conclusion must be reached on the basis of the facts gleaned from the prior art. Certainly, Applicants recognize that any judgment of obviousness is in some sense necessarily a reconstruction based on hindsight reasoning. However, such reconstruction may take into account only knowledge that was within the level of ordinary skill in the art at the time the claimed invention was made. See, MPEP §2145(X)(A).

The ultimate determination of patentability must take into account the entire record. The decision is based on the legal standard of "a preponderance of evidence." With regard to rejections under 35 U.S.C. 103, the Examiner must provide evidence which as a whole shows that the legal determination of obviousness is more probable than not. See, MPEP §2142.

Thus, one query centers on what a person of skill in the art having the benefit of the cited references but without the benefit of the present application would have considered obvious at the time the invention was made. If the preponderance of the evidence does not weigh in favor of finding that the claimed invention would have been obvious to such a person, then the rejection cannot be maintained.

In his declaration, Mr. Norton notes that in actual practice, despite an interest in reducing material costs for the tile disclosed in the Higgins '857 patent, the density was maintained at about 16 pounds per cubic foot due to concerns over cushion quality and the effect on dimensional stability, long term durability and installation performance. Thus, the Office Action's proposed substitution of the low density foam pad of De Simone '207 for the high density foam layer of Higgins '857 would be inconsistent with actual historical design practices.

The earlier filed declarations establish the accepted wisdom in the art that rebond foam would not be suited for carpet tiles. As noted at MPEP §2145, proceeding contrary to accepted wisdom is evidence of nonobviousness. In addition, Mr. Norton's declaration outlines numerous perceived disadvantages of rebond foam and the De Simone '207 rebond foam material that would weigh against their use in the manner proposed by the Office Action.

In view of the fact that the carpet tile of the Higgins '857 patent is specifically stated to be suitable as a freelay commercial carpet tile, it is respectfully submitted that the evidence of

record weighs particularly heavily against the conclusion that the modification proposed by the Office Action would be obvious. In this regard, Applicants note that the data in De Simone et al. '207 actually weighs against the proposed modification since it would be considered to place dimensional stability at risk. Applicants further note that there is no indication in De Simone et al. '207 that the rebond foam as described can be placed in a carpet tile. The design requirements for carpet tile are particularly rigorous due to concerns over dimensional stability and the like. Thus, it is respectfully submitted that the data in De Simone et al. '207 showing reduced physical performance characteristics actually weigh against the proposed placement of rebond foam in a carpet tile.

If the evidence is properly considered in its entirety, Applicants respectfully submit that there can be no reasonable determination that the preponderance of such evidence weighs in favor of obviousness. Unless the preponderance of evidence weighs in favor of a conclusion of obviousness, the claims must be allowed. The evidence of record establishes the accepted wisdom in the art that rebond foam would not be suited for carpet tiles. The evidence also shows that one of skill in the art would have considered the proposed modification of the carpet tile in Higgins '857 to be problematic since the tile being modified is intended to be suitable as a freelay commercial tile. The evidence further establishes that the data in the cited De Simone et al. '207 reference would have actually provided a disincentive to the proposed modification. In light of such evidence, that the references do not disclose the claimed invention, and copying by others, Applicants respectfully submit that the conclusion of obviousness cannot be maintained and that such a conclusion is based on impermissible hindsight and is in contradiction to the

controlling standards of patentability.

As described in the declarations, it would not have been obvious for one of ordinary skill in the carpet tile art to use the rebond foam material of De Simone et al. '207 in a cushion back carpet tile, and contrary to the position taken by the Office Action, one of skill in the art would not have been motivated to substitute the foam layer in the tile disclosed in Higgins '857 with the rebond foam materials from De Simone et al. '207.

As pointed out in previous responses, since De Simone et al. '207 is not directed to carpet tile or even attached cushion broadloom carpet, neither De Simone et al. '207 nor Higgins '857 provide the necessary motivation or suggestion for combination or for substituting the in-situ rebonded foam of De Simone et al. '207 for the foam layer of Higgins '857. One skilled in the art would recognize that carpet tile require vastly different performance characteristics from broadloom carpet. As such, one skilled in the tile art would not read the suggestion to bind the rebonded foam of De Simone '207 to carpet backing fabric as a suggestion to use the rebonded foam in a carpet tile. Proceeding contrary to accepted wisdom in the art is sufficient to show nonobviousness when the prior art does not have an explicit teaching thereto. In particular, there is no explicit teaching of using preformed rebond foam in a carpet tile or even as a carpet backing. As made clear from the Norton and Kilpatrick declarations, carpet tiles are highly engineered products that must exhibit durability while retaining dimensional stability. The teachings in De Simone '207 make no mention of carpet tile and the evidence of record discredits the proposed extension of De Simone '207 to carpet tile. Thus, the art falls far short of an

"explicit teaching" of the present invention. Rather, the accepted wisdom in the art weighs against the proposed modification and is not countered by any explicit teaching in the art. Under these circumstances it is respectfully submitted that the requisite motivation to make the proposed combination is clearly lacking.

Even if just for the sake of argument, one were to hypothetically combine the in-situ rebonded foam of De Simone et al. '207 with a carpet face material, one would form an in-situ attached cushion broadloom product (not tile, not cushion back carpet tile, and not cushion back carpet tile with a preformed sheet of polyurethane rebond foam). Attached cushion broadloom, especially non-stabilized (non-reinforced) attached cushion broadloom is not carpet tile and is not cushion back carpet tile.

The De Simone et al. '207 in-situ rebonded foam process is described, for example, at column 2, lines 34 – 40.

Moreover, copying by others (by at least one competitor in Europe) is an additional indicator of patentability. Presumably, in light of Applicant's products and publications, Interface started using a rebond foam layer in at least their European cushion back carpet tiles in about late 2004.

Conclusion:

For the reasons set forth above, it is respectfully submitted that all claims now stand in

condition for allowance. Should any issues remain after consideration of this Amendment and accompanying Remarks, the Examiner is invited and encouraged to telephone the undersigned in the hope that any such issue may be promptly and satisfactorily resolved.

In the event that there are additional fees associated with the submission of these papers (including extension of time fees), authorization is hereby provided to withdraw such fees from Deposit Account No. 04-0500.

Respectfully requested,

May 14, 2007

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CERTIFICATE OF TRANSMISSION

I hereby certify that this correspondence, along with a Request for Extension of Time, is being facsimile transmitted to the United States Patent and Trademark Office at 571-273-8300 on May 14, 2007.

Daniel R. Alexander
(Attorney for Applicant)